

$V_{out} = A_d (V_+ - V_-) + \frac{1}{2} A_c (V_+ + V_-) [V]$	$DR = 20 \log_{10} (V_{max} / V_{min}) [dB]$
$CMRR = 20 \log_{10} (A_d / A_c) [dB]$	$SQNR = 6.02N + 1.76 [dB]$
$NEF = V_{IRN} \cdot \sqrt{(2I_{BIAS} / (\pi \cdot V_t \cdot 4kT \cdot BW))}$	$DR_{actual} = 6.02ENOB + 1.76 [dB]$
$FOMS = DR_{dB} + 10 \log_{10} (BW / P) [dB]$	$\Phi_t = V_t = kT / q [V]$
$I_{ds} = \mu_n C_{ox} (W/L) \{(V_{gs} - V_{th})V_{ds} - \frac{1}{2} V_{ds}^2\} [A]$	$S_I^2(f) = 2qI [A^2/Hz]$
$I_{ds} = \frac{1}{2} \mu_n C_{ox} (W/L) (V_{gs} - V_{th})^2 [A]$	$S_I^2(f) = 4kT/R [A^2/Hz]$
$I_{ds} = I_0 \exp (K_s \cdot V_{gs} / \Phi_t) [A]$	$S_V^2(f) = 4kTR [V^2/Hz]$
$R_{CT} = (RT / nF) \cdot 1 / i_0$	$P_n = kT / C [V^2]$

$k = 1.38 \cdot 10^{-23} [J/K]$	$q = 1.6 \cdot 10^{-19} [C]$	$T = 300 [K] *$
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* Unless stated otherwise in the question